WHAT IS CLAIMED IS:

1. An isolated polynucleotide comprising a polynucleotide which is at least 70% identical to a member selected from the group consisting of:

(a) a polynucleotide encoding a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence set forth in Figure 2 (SEQ ID NO: 2) and

(b) a polynucleotide which is complementary to the polynucleotide of (a).

2. The polynucleotide of Claim 1 wherein the polynucleotide is DNA.

3. The polynucleotide of Claim 1 wherein the polynucleotide is RNA.

4. The polynucleotide of Claim 1 wherein the polynucleotide is genomic DNA.

5. The polynucleotide of Claim 2 wherein the polynucleotide encodes the polypeptide comprising amino acids 1 to 553 as set forth in Figure 2 (SEQ ID NO: 2).

6. The polynucleotide of Claim 1 wherein the polynucleotide comprises the sequence as set forth in Figure 1 (SEQ ID NO: 1) from nucleotide 1 to nucleotide 3320.

7. The polynucleotide of Claim 1 wherein the polynucleotide comprises the sequence as set forth in Figure 1 (SEQ ID NO: 1) from nucleotide 282 to nucleotide 1943.

8. A vector comprising the polynucleotide of Claim 2.

9. A host cell comprising the vector of Claim 8.

10. A method of producing a polypeptide comprising expressing from the host cell of Claim 9 the polypeptide encoded by the polynucleotide.

11. The method of Claim 10 wherein the polypeptide comprises amino acid 1 to amino acid 553 as set forth in Figure 2 (SEQ ID NO: 2).

12. A method of producing a polypeptide wherein the polypeptide comprises the amino acid sequence shown in Figure 2 (SEQ ID NO: 2), the method comprising the steps of:

(a) culturing the host cell of Claim 9 under conditions whereby the polypeptide is expressed; and

(b) recovering the polypeptide from the culture.

13. A method for producing a cell which expresses a polypeptide comprising genetically engineering the cell with the vector of Claim 8.

14. A polypeptide comprising a member selected from the group consisting of:

(a) a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2); and

(b) a polypeptide which is at least 70% identical to the polypeptide of (a).

15. The polypeptide of Claim 14 wherein the polypeptide comprises amino acids 1 to 553 as set forth in Figure 2 (SEQ ID NO: 2).

16. An isolated antibody, or antibody fragment, which specifically binds to a polypeptide comprising a member selected from the group consisting of:

(a) a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2);

(b) a polypeptide comprising amino acid 181 to amino acid 197 as set forth in Figure 2 (SEQ ID NO: 23);

(c) a polypeptide comprising amino acid 225 to amino acid 240 as set forth in Figure 2 (SEQ ID NO: 26);

(d) a polypeptide comprising amino acid 294 to amino acid 322 as set forth in Figure 2 (SEQ ID NO: 25);

(e) a polypeptide comprising amino acid 406 to amino acid 431 as set forth in Figure 2 (SEQ ID NO: 21);

(f) a polypeptide comprising amino acid 544 to amino acid 553 as set forth in Figure 2 (SEQ ID NO: 24); and

(g) a polypeptide which is at least 70% identical to the polypeptide of (a), (b), (c), (d), (e), or (f).

17. The antibody of Claim 16, wherein the antibody specifically binds to the amino acid sequence IDWDTSALAPYLGTQEE (SEQ ID NO: 23).

18. The antibody of Claim 16 wherein the antibody specifically binds to the amino acid sequence PTEPAEGLSAPSLSPH (SEQ ID NO: 26).

19. The antibody of Claim 16, wherein the antibody specifically binds to the amino acid sequence DFVGEGLYQGVPRAEGTEARRHYDEGVR (SEQ ID NO: 25).

20. The antibody of Claim 16, wherein the antibody specifically binds to the amino acid sequence EKQVFLPKYRGDTGGASSEDSLMTSF (SEQ ID NO: 21).

21. The antibody of Claim 16, wherein the antibody specifically binds to the amino acid sequence DKSDLAKYSA (SEQ ID NO: 24).

22. The antibody of Claim 16, wherein the antibody is a polyclonal antibody.

23. The antibody of Claim 16, wherein the antibody is a monoclonal antibody.

24. An immunoconjugate comprising an isolated antibody, or antibody fragment, which specifically binds to a polypeptide comprising a member selected from the group consisting of:

(a) a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2);

(b) a polypeptide comprising amino acid 181 to amino acid 197 as set forth in Figure 2 (SEQ ID NO: 23);

(c) a polypeptide comprising amino acid 225 to amino acid 240 as set forth in Figure 2 (SEQ ID NO: 26);

(d) a polypeptide comprising amino acid 294 to amino acid 322 as set forth in Figure 2 (SEQ ID NO: 25);

(e) a polypeptide comprising amino acid 406 to amino acid 431 as set forth in Figure 2 (SEQ ID NO: 21);

(f) a polypeptide comprising amino acid 544 to amino acid 553 as set forth in Figure 2 (SEQ ID NO: 24); and

(g) a polypeptide which is at least 70% identical to the polypeptide of (a), (b), (c), (d), (e) or (f)

conjugated to a therapeutic agent.

25. The immunoconjugate of Claim 24, wherein the therapeutic agent is a cytotoxic agent.

26. The immunoconjugate of Claim 25, wherein the cytotoxic agent is selected from the group consisting of ricin, doxorubicin, daunorubicin, taxol, ethidium bromide, mitomycin, etoposied, tenoposide, vincristine, vinblastine, colchicine, dihydroxy anthracin dione, actinomycin D, diphteria toxin, *Pseudomonas* exotoxin (PE) A, PE40, ricin, abrin, glucocorticoid and radioisotopes.

27. The immunoconjugate of Claim 24, wherein the antibody fragments are selected from the group consisting of Fv, F(ab') and $F(ab')_2$ fragments.

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28. A method for selectively destroying a cell expressing the polypeptide of Figure 2 (SEQ ID NO: 2) comprising reacting the immunoconjugate of Claim 24 with the cell so that the therapeutic agent of the immunoconjugate can destroy the cell.

29. A method of treating a disease-state in a human patient which disease-state is associated with expression of PROST 03 and wherein the method comprises administering to the patient a therapeutically effective amount of the immunoconjugate of Claim 24.

30. A method of treating a disease-state in a human patient which disease-state is associated with inappropriate expression of PROST 03 and wherein the patient is in need of decreased levels of a polypeptide comprising a member selected from the group consisting of:

(a) a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2); and

(b) a polypeptide which is at least 70% identical to the polypeptide of (a) and wherein the method comprises administering to the patient a therapeutically effective amount of a ribozyme which specifically cleaves RNA encoding the polypeptide.

31. A method of treating a disease-state in a human patient which disease-state is associated with inappropriate expression of PROST 03 and wherein the patient is in need of decreased levels of a polypeptide having the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2), and wherein the method comprises administering to the patient a therapeutically effective amount of a polynucleotide which is complementary to a polynucleotide encoding the polypeptide or a portion thereof.

32. A diagnostic method wherein the method comprises analyzing a sample derived from a host for the presence of a polypeptide comprising a member selected from the group consisting of:

(a) a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2);

(b) a polypeptide comprising amino acid 181 to amino acid 197 as set forth in Figure 2 (SEQ ID NO: 23);

(c) a polypeptide comprising amino acid 225 to amino acid 240 as set forth in Figure 2 (SEQ ID NO: 26);

(d) a polypeptide comprising amino acid 294 to amino acid 322 as set forth in Figure 2 (SEQ ID NO: 25);

(e) a polypeptide comprising amino acid 406 to amino acid 431 as set forth in Figure 2 (SEQ ID NO: 21);

(f) a polypeptide comprising amino acid 544 to amino acid 553 as set forth in

Figure 2 (SEQ ID NO: 24); and

(g) a polypeptide which is at least 70% identical to the polypeptide of (a), (b), (c), (d), (e) or (f).

33. The method of Claim 32, wherein analyzing comprises contacting the sample with the antibody or antibody fragment of Claim 16, which specifically binds to the polypeptide and detecting binding of the antibody to the polypeptide in the sample.

34. A diagnostic method wherein the method comprises analyzing for the presence of a polynucleotide comprising a polynucleotide which is at least 70% identical to a member selected from the group consisting of:

(a) a polynucleotide encoding a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence set forth in Figure 2 (SEQ ID NO: 2); and

(b) polynucleotide which is complementary to the polynucleotide of (a).

35. A method for diagnosing in a subject a metastasis associated with the polypeptide of Figure 2 (SEQ ID NO: 2) comprising:

(a) obtaining from the subject a tissue and/or fluid sample;

(b) contacting the sample with the antibody of Claim 16; and

(c) detecting the binding of the antibody with the polypeptide in the sample.

36. The method of Claim 35, wherein the antibody is labeled so as to directly or indirectly produce a detectable signal with a compound selected from the group consisting of a radiolabel, an enzyme, a chromophore and a fluorescer.

37. A vaccine comprising an amount of a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2), dispersed in a physiologically acceptable, nontoxic vehicle, which amount is effective to induce an immune response in a human against prostate cancer associated with PROST 03 expression.

38. A vaccine comprising a DNA sequence encoding a polypeptide, or a biologically or immunologically active fragment thereof, comprising the amino acid sequence as set forth in Figure 2 (SEQ ID NO: 2), wherein said DNA is operably linked to a promoter, and where, following administration in vivo into a tissue of a mammal, sufficient uptake of said DNA into cells occurs, and sufficient expression of the polypeptide or fragment occurs, so as to produce an immunogenic amount of said polypeptide or fragment, which amount is effective to immunize a human against prostate cancer associated with PROST 03 expression.